

ABSTRACT OF THE DISCLOSURE

A small-size thin-bodied 3-dimensional matrix switch using a micro mirror array, comprises a collimator array with a plurality of collimators coupled to optical fibers, a mirror array with a plurality of movable mirrors, in which each movable mirror has light from a first collimator of the collimator array optically coupled thereto, a first mirror which has the light from the mirror of the mirror array optically coupled thereto, a second mirror which has the light from the first mirror optically coupled thereto, and a second collimator of the collimator array, which has the light from the second mirror coupled thereto, wherein the light leaving the second mirror passes the first mirror and the mirror array and optically couples to the second collimator.